



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
Group Art Unit 2837

In re

Patent Application of

Brian T. Branecky, et al.

Application No. 10/662,052

Confirmation No. 8331

Filed: September 12, 2003

Examiner: McCloud, Renata D.

“FIXED SPEED DRIVE”

I, Bridget Laack, hereby certify that this correspondence is being deposited with the US Postal Service as first class mail in an envelope addressed to Assistant Commissioner for Patents, Washington, D.C. 20231, on the date of my signature.

Bridget Laack  
Signature

July 21, 2006  
Date of Signature

**COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE**

Mail Stop Issue Fee  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This communication is in response to the Examiner's statement of the reasons for allowance of the claims, contained within the Notice of Allowance and Fee(s) Due mailed April 24, 2006. The Examiner may have generalized some of the features of the independent claims and did not discuss the dependent claims. Therefore, the reasons set forth by the Examiner are not the only reasons claims 1-3, 7, 8, 10-16, 20-24, 39-41, 45, 46, and 48-52 are allowable. Each of claims 1-3, 7, 8, 10-16, 20-24, 39-41, 45, 46, and 48-52 may include additional patentable features or combinations of features not mentioned by the Examiner.

Applicants assert, with respect to independent claim 1, the prior art does not teach or suggest a controller for an electric machine, the controller comprising:

a switch coupled to the electric machine, having a plurality of power inputs, and operable to selectively couple one of the power inputs to the electric machine;

a first voltage input coupled to one of the power inputs of the switch, configured to receive a first voltage, and operable to provide the first voltage to the switch;

an inverter coupled to a second voltage input and a second power input of the switch, and configured to be activated by a second voltage received at the second voltage input, to frequency-regulate the second voltage to generate a frequency-regulated voltage, and to provide the frequency-regulated voltage to the switch;

a module coupled to the first and second voltage inputs to receive the first and second voltages, and configured to generate different signals representing the receipt of the first and second voltages; and

a micro-controller coupled to the module to receive the different signals, and configured to generate a soft control signal based on the different signals and to selectively control the coupling of one of the first voltage and the frequency regulated voltage to the electric machine with the soft control signal applied to the switch.

Various dependent claims ultimately depend from claim 1. Accordingly, each of these dependent claims is believed to be allowable based upon claim 1 and upon other features recited in the claims, but not discussed herein.

Applicants assert, with respect to independent claim 15, the prior art does not teach or suggest a controller for an electric machine, the controller comprising:

a voltage input configured to receive a first voltage;

a relay module coupled to the voltage input, and configured to relay the first voltage and to generate a second voltage;

an inverter coupled to the relay module, and configured to be activated by the second voltage, and to generate a frequency-regulated voltage;

a module coupled to the relay module to receive the first voltage and the second voltage, and configured to generate different signals representing the first voltage and the second voltage;

a micro-controller coupled to the module to receive the different signals, and configured to generate a soft control signal based on the different signals;

a second relay coupled to the micro-controller, and configured to select an electric machine operating voltage from the first voltage and the frequency regulated voltage using the soft control signal.

Various dependent claims ultimately depend from claim 15. Accordingly, each of these dependent claims is believed to be allowable based upon claim 15 and upon other features recited in the claims, but not discussed herein.

Applicants assert, with respect to independent claim 39, the prior art does not teach or suggest a controller for an electric machine, the controller comprising:

an inverter coupled to a first voltage input, the inverter configured to be activated by a first voltage received at a first voltage input, and to frequency-regulate the first voltage to generate a frequency-regulated voltage; and

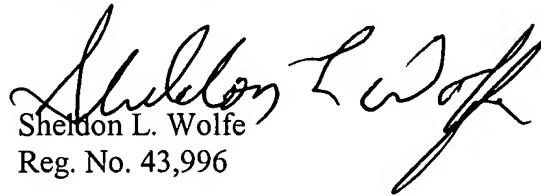
a switch coupled to the inverter and a second voltage input, the switch configured to receive the frequency-regulated voltage and [[a]] the second voltage received at the second voltage input, and to selectively apply one of the received voltages to the electric machine;

a module coupled to the first and second voltage inputs, the module configured to receive the first and second voltages and to generate different signals to represent the receipt of the first and second voltages; and

a micro-controller coupled to the module to receive the different signals, and configured to generate a soft control signal based on the different signals and to selectively control the coupling of one of the second voltage and the frequency regulated voltage to the electric machine with the soft control signal applied to the switch.

Various dependent claims ultimately depend from claim 39. Accordingly, each of these dependent claims is believed to be allowable based upon claim 39 and upon other features recited in the claims, but not discussed herein.

Respectfully submitted,

  
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